

**IN-SITU METALIZATION MONITORING USING EDDY CURRENT
MEASUREMENTS DURING THE PROCESS FOR REMOVING THE FILM**

ABSTRACT OF THE DISCLOSURE

A method for measuring conductance of a sample using an eddy current probe

5 with a sensing coil. The method includes N repetitions of measuring first and second voltage pairs including in-phase and quadrature components of an induced AC voltage in the sensing coil, calibrating the first signal based on the measured second signal at a different separation from the sample and reference material, determining a conductance function relating conductance with location along the selected curve,

10 processing the calibrated first voltage pairs to generate a lift-off curve, determining an intersection voltage pair representing intersection of the lift-off curve with a selected curve, and determining the conductance of the sample from the intersection voltage pair and the conductance function.